Colorado Academic Standards - Mathematics

Mathematics

Kindergarten, Standard 1. Number and Quantity

Prepared Graduates:

MP7. Look for and make use of structure.

MP8. Look for and express regularity in repeated reasoning.

Grade Level Expectation:

K.CC.A. Counting & Cardinality: Use number names and the count sequence.

GLE Code: MA.K.CC.A

Evidence Outcomes

Students Can:

- Count to 100 by ones and by tens. (CCSS: K.CC.A.1)
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1). (CCSS: K.CC.A.2)
- Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects). (CCSS: K.CC.A.3)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Recognize that the number sequence from 1 to 9 repeats between the decade numbers, except in the spoken numbers between 10 and 20. (MP7)
- Reason that counting to 100 by tens reaches the same number as can be counted repeatedly by ones. (MP8)

Inquiry Questions:

- When might you want to count by tens instead of ones?
- When might you want to start counting from a number other than one?
- What number can we use to show we have nothing to count?

Coherence Connections:

- This expectation represents major work of the grade.
- In preschool, students understand that number words have a sequence and that the words are separate (not "onetwothree").
- In kindergarten, this expectation is key to several progressions of learning: (a) from saying the counting words to counting out objects, (b) from counting to counting on, and (c) from spoken number words to written base-ten numerals to base-ten system understanding.
- In Grade 1, students extend the counting sequence to 120.

Montessori Material(s): Number Rods, Teens Boards, Tens Boards, Golden Beads

Mathematics

Kindergarten, Standard 1. Number and Quantity

Prepared Graduates:

MP2. Reason abstractly and quantitatively.

MP3. Construct viable arguments and critique the reasoning of others.

MP7. Look for and make use of structure.

Grade Level Expectation:

K.CC.B. Counting & Cardinality: Count to determine the number of objects.

GLE Code: MA.K.CC.B

Evidence Outcomes

Students Can:

- Apply the relationship between numbers and quantities and connect counting to cardinality. (CCSS: K.CC.B.4)
    - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. (CCSS: K.CC.B.4.a)
    - Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. (CCSS: K.CC.B.4.b)
    - Understand that each successive number name refers to a quantity that is one larger. (CCSS: K.CC.B.4.c)
- Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. (CCSS: K.CC.5)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Progress from thinking about numbers as the result of the process of counting to abstractly thinking about numbers as mental objects of their own—especially the quantity 10. (MP2)
- Explain how the number reached when counting on is a relationship between the quantity started from and the quantity added. (MP3)
- Make counting efficient by following rows, columns, or other patterns in a group of arranged objects. (MP7)

Inquiry Questions:

- How is counting to five different from the number five?
- What number is one larger than four? What number is one larger than seven?

Coherence Connections:

- This expectation represents major work of the grade.
- In preschool, students build conceptions of what whole numbers mean, of subitizing, of one-to-one correspondence between verbal counting and objects, and of cardinality.
- In kindergarten, this expectation is key to several progressions of learning: (a) from saying the counting words to counting out objects, (b) from counting to counting on, and (c) from spoken number words to written base-ten numerals to base-ten understanding.
- In Grade 1, students use their understanding of counting and cardinality to add and subtract within 20.

Montessori Material(s): Spindle Boxes, Cards & Counters, Short Chains

Mathematics

Kindergarten, Standard 1. Number and Quantity

Prepared Graduates:

MP3. Construct viable arguments and critique the reasoning of others.

MP6. Attend to precision.

Grade Level Expectation:

K.CC.C. Counting & Cardinality: Compare numbers.

GLE Code: MA.K.CC.C

Evidence Outcomes

Students Can:

- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to 10 objects.) (CCSS: K.CC.C.6)
- Compare two numbers between 1 and 10 presented as written numerals. (CCSS: K.CC.C.7)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Make reasoned arguments about the relative sizes of groups, such as by matching objects of two groups and seeing which has extra objects, or by counting the objects in each group and seeing which has the number further in the counting sequence. (MP3)
- Use precise language to describe why one quantity is less than, greater than, or equal to another, and avoid mixing and misusing different ways of quantifying such as dimension, weight, or magnitude. (MP6)

Inquiry Questions:

- Other than counting, how might you decide whether one set has more objects than another?
- Which is more, 3 small cookies or 2 big cookies? What makes this difficult to answer?

Coherence Connections:

- This expectation represents major work of the grade.
- In preschool, students build an understanding of same versus different numbers of items, numbers of objects versus their size, and ordering from first to fifth.
- In kindergarten, this expectation is key to several progressions of learning: (a) from counting to counting on and (b) from comparison by matching to comparison by numbers to comparison involving adding and subtracting.
- In Grade 1, students build an understanding of ten and place value with two-digit numbers. Students also organize data into categories and compare how many more or less are in one category than in another.

Montessori Material(s): Memory Game of Number, Number Rods

Mathematics

Kindergarten, Standard 1. Number and Quantity

Prepared Graduates:

MP6. Attend to precision.

MP7. Look for and make use of structure.

MP8. Look for and express regularity in repeated reasoning.

Grade Level Expectation:

K.NBT.A. Number & Operations in Base Ten: Work with numbers 11–19 to gain foundations for place value.

GLE Code: MA.K.NBT.A

Evidence Outcomes

Students Can:

- Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. (CCSS: K.NBT.A.1)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Be precise in drawings, diagrams, and numerical recordings about objects or symbols that represent ones and objects or symbols that represent tens. (MP6)
- See the structure of a number as composed of its base-ten units. (MP7)
- Repeat the reasoning afforded by the uniformity of the base-ten system, where 10 copies compose 1 base-ten unit of the next highest value. (MP8)

Inquiry Questions:

- Can you show the number 13 as ten ones and some more ones? How many more ones than tens are there?
- In the number 11, what makes the "1" on the left different from the "1" on the right? Could you show this with objects or a diagram?
- What would a number called "ten four" look like? What word do we usually say for this number?
- Why might someone call the number 17 "ten seven?"

Coherence Connections:

- This expectation represents major work of the grade.
- In preschool, students develop conceptions of addition and subtraction when adding to and taking away from small collections of objects.
- In kindergarten, this expectation is part of a progression from comparison by spoken number words to written base-ten numerals to base-ten system understanding.
- In Grade 1, students build an understanding of ten and place value with two-digit numbers.

Montessori Material(s): Teens Beads & Boards

Mathematics

Kindergarten, Standard 2. Algebra and Functions

Prepared Graduates:

MP4. Model with mathematics.

MP5. Use appropriate tools strategically.

MP6. Attend to precision.

Grade Level Expectation:

K.OA.A. Operations & Algebraic Thinking: Model and describe addition as putting together and adding to, and subtraction as taking apart and taking from, using objects or drawings.

GLE Code: MA.K.OA.A

Evidence Outcomes

Students Can:

- Represent addition and subtraction with objects, fingers, mental images, drawings (drawings need not show details, but should show the mathematics in the problem), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (CCSS: K.OA.A.1)
- Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (CCSS: K.OA.A.2)
- Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). (CCSS: K.OA.A.3)
- For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. (CCSS: K.OA.A.4)
- Fluently add and subtract within 5. (CCSS: K.OA.A.5)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Make sense of real-world situations involving addition and subtraction (Entrepreneurial Skills: Critical Thinking/Problem Solving)
- Mathematize a real-world situation, focusing on the quantities and their relationships rather than non-mathematical aspects of the situation. (MP4)
- Act out adding and subtracting situations by representing quantities in the situation with objects, fingers, and math drawings. (MP5)
- Use the equal sign consistently and appropriately. (MP6)

Inquiry Questions:

- How could you show me adding 3 and 2?
- How could you show me 3 take away 2?

Coherence Connections:

- This expectation represents major work of the grade.
- In preschool, students represent addition and subtraction within 5 with fingers, objects, and drawings.
- In kindergarten, this expectation is part of a progression involving addition and subtraction of increasingly large numbers and increasingly complex problem subtypes (see Appendix, Table 1).
- In Grade 1, students understand properties of operations, the relationship between addition and subtraction, and add and subtract within 20.

Montessori Material(s): Addition and Subtraction Strip Boards, Addition and Subtraction Finger Charts

Mathematics

Kindergarten, Standard 3. Data, Statistics, and Probability

Prepared Graduates:

MP6. Attend to precision.

Grade Level Expectation:

K.MD.A. Measurement & Data: Describe and compare measurable attributes.

GLE Code: MA.K.MD.A

Evidence Outcomes

Students Can:

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (CCSS: K.MD.A.1)
- Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.* (CCSS: K.MD.A.2)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Make sense of their world by comparing and ordering objects by their attributes. (Entrepreneurial Skills: Inquiry/Analysis)
- Be precise about meanings related to size when describing an object's height, weight, or other attribute. (MP6)

Inquiry Questions:

- What does it mean for one object to be "bigger" than another?
- If you are standing on a chair, how should your height be measured differently than if you were standing on the floor?
- If an object is moved, does that change its size?

Coherence Connections:

- This expectation is in addition to the major work of the grade.
- In preschool, students develop conceptions of measurable attributes of objects and comparisons based on those attributes.
- In kindergarten, this expectation can contribute to students' understandings of measurable attributes, comparison, and conservation of length, all of which connect to progressions in geometry, the number system, and to future work in ratio and proportion.
- In Grade 1, students measure lengths directly and by iterating length units, and express the length of an object as a whole number of length units.

Montessori Material(s): Pink Tower, Broad Stair, Red Rods, Cylinder Blocks, Knobless Cylinders, Baric Tablets

Mathematics

Kindergarten, Standard 3. Data, Statistics, and Probability

Prepared Graduates:

MP1. Make sense of problems and persevere in solving them.

MP2. Reason abstractly and quantitatively.

MP5. Use appropriate tools strategically.

Grade Level Expectation:

K.MD.B. Measurement & Data: Classify objects and count the number of objects in each category.

GLE Code: MA.K.MD.B

Evidence Outcomes

Students Can:

- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.) (CCSS: K.MD.B.3)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Group objects into categories to help make sense of problems. (MP1)
- Abstract individual objects into new conceptual groups. (MP2)
- Choose appropriate representations of objects and categories. (MP5)

Inquiry Questions:

- How can numbers of objects be represented to make comparisons?
- How can objects be categorized in different ways?
- How can an object's attributes determine if it does not belong with other objects in a group?

Coherence Connections:

- This expectation supports the major work of the grade.
- In preschool, students use differences in attributes to make comparisons.
- In kindergarten, this expectation supports the work of counting and comparing numbers and is part of a progression of learning how to analyze categorical data.
- In Grade 1, students organize, represent, and interpret data with up to three categories.

Montessori Material(s): Bar Graphs

Mathematics

Kindergarten, Standard 4. Geometry

Prepared Graduates:

MP4. Model with mathematics.

MP6. Attend to precision.

MP7. Look for and make use of structure.

Grade Level Expectation:

K.G.A. Geometry: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

GLE Code: MA.K.G.A

Evidence Outcomes

Students Can:

- Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*. (CCSS: K.G.A.1)
- Correctly name shapes regardless of their orientations or overall size. (CCSS: K.G.A.2)
- Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). (CCSS: K.G.A.3)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Describe the physical world from geometric perspectives, e.g., shape, orientation, and spatial relationships. (MP4)
- Reflect an increasing understanding of shapes by using increasingly precise language to describe them. (MP6)
- Sort shapes into categories (squares, circles, triangles, etc.) based on attributes of the shapes. (MP7)

Inquiry Questions:

- For a given shape, what attributes make an example of that shape different from a non-example? For example, "Why is this shape (point to a square) a square, while this shape (point to a non-square) is not?"
- What are the ways of describing where an object is?

Coherence Connections:

- This expectation is in addition to the major work of the grade.
- In preschool, students learn about circles, squares, triangles, and their parts.
- In kindergarten, this expectation connects with the work of analyzing, comparing, creating, and composing shapes.
- In future grades, students calculate area and surface area of these and other shapes.

Montessori Material(s): Geometry Cabinet, Constructive Triangles

Mathematics

Kindergarten, Standard 4. Geometry

Prepared Graduates:

MP2. Reason abstractly and quantitatively.

MP4. Model with mathematics.

MP7. Look for and make use of structure.

Grade Level Expectation:

K.G.B. Geometry: Analyze, compare, create, and compose shapes.

GLE Code: MA.K.G.B

Evidence Outcomes

Students Can:

- Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). (CCSS: K.G.B.4)
- Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. (CCSS: K.G.B.5)
- Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"* (CCSS: K.G.B.6)

Academic Context and Connections

Colorado Essential Skills and Mathematical Practices:

- Use experiences with multiple examples of a type of shape to develop a concept image (see glossary) of that shape from which they can abstract common features. (MP2)
- Model shapes in the world by building them with components or drawing representations of them. (MP4)
- Use patterns or structures when making comparisons or compositions of shapes. (MP7)

Inquiry Questions:

- Can you change a shape into a different kind of shape by rotating it?
- What kinds of pictures can you make by combining shapes?

Coherence Connections:

- This expectation is in addition to the major work of the grade.
- In preschool, students understand and use language related to directionality, order, and the position of objects, such as up/down and in front/behind.
- In kindergarten, this expectation connects with identifying and describing shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- In Grade 1, students classify, compose, and partition shapes.
- (Given a bar graph representation of up to four categories of animals) How many more birds are there than hippos? How many more giraffes would there need to be in order for the number of giraffes to equal the number of elephants?

Coherence Connections:

- This expectation supports the major work of the grade.
- In Grade 1, students organize, represent, and interpret data with up to three categories and compare how many more or less are in one category than another.
- In Grade 2, this expectation connects with representing and solving problems involving addition and subtraction and with relating addition and subtraction to length.
- In Grade 3, students draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.

Montessori Material(s): Geometry Cabinet, Constructive Triangles, Geometric Solids

Colorado Academic Standards – Reading, Writing, and Communicating

Reading, Writing, and Communicating

Kindergarten, Standard 1. Oral Expression and Listening

Prepared Graduates:

- Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.

Grade Level Expectation:

- Communicate using verbal and nonverbal language.

GLE Code: RW.K.1.1

Evidence Outcomes

Students Can:

- Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups. (CCSS: SL.K.1)*
    - Follow agreed-upon rules for discussions (for example: listening to others and taking turns speaking about the topics and texts under discussion). (CCSS: SL.K.1a)
    - Continue a conversation through multiple exchanges. (CCSS: SL.K.1b)
- Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood. (CCSS: SL.K.2) *
- Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (CCSS: SL.K.3) *
- Listen with comprehension to follow two-step directions. *
- Use words and phrases acquired through conversations, reading and being read to, and responding to texts. (CCSS: L.K.6) *

Academic Context and Connections

Colorado Essential Skills:

- Accurately recognize one's own emotions, thoughts, and values and how they influence behavior. (Personal Skills, Self-Awareness)
- Demonstrate an understanding of cause and effect related to personal decisions. (Civic/Interpersonal Skills, Character)
- Appropriately express a range of emotions to communicate personal ideas/needs. (Professional Skills, Self-Advocacy)

Essential Questions:

- How do we have conversations?
- Why is it important for people to wait their turn before speaking?
- What does it mean to be a good listener?

Essential Reasoning Skills:

- Questions are where learning begins.
- Thoughtful speakers and listeners establish agreed upon rules for communicating in their environment.

Minimum Skills Competencies:

- Evidence Outcomes marked with an asterisk (*) are the minimum competencies identified in the READ Act.

Montessori Material(s): Oral Language, Read-Alouds, Small and Large Group Work, Grace & Courtesy

Reading, Writing, and Communicating

Kindergarten, Standard 1. Oral Expression and Listening

Prepared Graduates:

- Deliver effective oral presentations for varied audiences and varied purposes.

Grade Level Expectation:

- Develop oral communication skills through a language-rich environment.

GLE Code: RW.K.1.2

Evidence Outcomes

Students Can:

- Describe familiar people, places, things, and events and, with prompting and support, provide additional detail. (CCSS: SL.K.4)
- Add drawings or other visual displays to descriptions as desired to provide additional detail. (CCSS: SL.K.5)
- Speak audibly and express thoughts, feelings, and ideas clearly. (CCSS: SL.K.6)
- Sort common objects into categories (for example: shapes, foods) to gain a sense of the concepts the categories represent. (CCSS: L.K.5a)
- Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). (CCSS: L.K.5b)
- Identify real-life connections between words and their use (for example: note places at school that are colorful). (CCSS: L.K.5c)
- Distinguish shades of meaning among verbs describing the same general action (for example: *walk*, *march*, *strut*, *prance*) by acting out the meanings. (CCSS: L.K.5d)
- Use new vocabulary that is directly taught through reading, speaking, and listening. *
- Relate new vocabulary to prior knowledge. *

Academic Context and Connections

Colorado Essential Skills:

- Articulate personal strengths and challenges using different forms of communication to express themselves. (Information and Communications Technologies)
- Ask questions and learn more about careers and other life pursuits. (Professional Skills, Career Awareness)
- Appropriately express a range of emotions to communicate personal ideas/needs. (Professional Skills, Self-Advocacy)

Essential Questions:

- Why is it important to learn new words and build speaking vocabularies?
- Why is it important to speak clearly and use words the person understands?
- How do we describe how objects belong together?

Essential Reasoning Skills:

- Effective communicators expand their vocabulary.

Minimum Skills Competencies:

- Evidence Outcomes marked with an asterisk (*) are the minimum competencies identified in the READ Act.

Montessori Material(s): Oral Language Development

Reading, Writing, and Communicating

Kindergarten, Standard 2. Reading for All Purposes

Prepared Graduates:

- Read a wide range of literary texts to build knowledge and to better understand the human experience.

Grade Level Expectation:

- Develop and apply the concepts of print and comprehension of literary texts.

GLE Code: RW.K.2.1

Evidence Outcomes

Students Can:

- Use Key Ideas and Details to:
    - With prompting and support, ask and answer questions about key details in a text. (CCSS: RL.K.1) *
    - With prompting and support, retell familiar stories, including key details. (CCSS: RL.K.2)
    - With prompting and support, identify characters, settings, and major events in a story. (CCSS: RL.K.3) *
- Use Craft and Structure to:
    - Ask and answer questions about unknown words in a text. (CCSS: RL.K.4)
    - Recognize common types of texts (for example: storybooks, poems). (CCSS: RL.K.5) *
    - With prompting and support, name the author and illustrator of a story and define the role of each in telling the story. (CCSS: RL.K.6)
- Use Integration of Knowledge and Ideas to:
    - With prompting and support, describe the relationship between illustrations and the story in which they appear (for example: what moment in a story an illustration depicts). (CCSS: RL.K.7)
    - With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories. (CCSS: RL.K.9)
- Use Range of Reading and Level of Text Complexity to:
    - Actively engage in group reading activities with purpose and understanding. (CCSS: RL.K.10)

Academic Context and Connections

Colorado Essential Skills:

- Demonstrate curiosity, imagination, and eagerness to learn more. (Entrepreneurial Skills, Creativity/Innovation)
- Demonstrate a willingness to try new things. (Entrepreneurial Skills, Informed Risk Taking)
- Articulate task requirements and identify deadlines. (Professional Skills, Task/Time Management)

Essential Questions:

- How do pictures help us understand a story?
- What are different ways to tell a story?
- How do we determine what a story is about?

Essential Reasoning Skills:

- Critical readers ask questions and draw conclusions from pictures and texts.

Minimum Skills Competencies:

- Evidence Outcomes marked with an asterisk (*) are the minimum competencies identified in the READ Act.

Montessori Material(s): Read Alouds—Supplemental Discussions on Author, Illustrator, Types of Texts

Reading, Writing, and Communicating

Kindergarten, Standard 2. Reading for All Purposes

Prepared Graduates:

- Read a wide range of informational texts to build knowledge and to better understand the human experience.

Grade Level Expectation:

- Develop and apply the concepts of print and comprehension of informational texts.

GLE Code: RW.K.2.2

Evidence Outcomes

Students Can:

- Use Key Ideas and Details to:
    - With prompting and support, ask and answer questions about key details in a text. (CCSS: RI.K.1) *
    - With prompting and support, identify the main topic and retell key details of a text. (CCSS: RI.K.2)
    - With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. (CCSS: RI.K.3)
- Use Craft and Structure to:
    - With prompting and support, ask and answer questions about unknown words in a text. (CCSS: RI.K.4)
    - Identify the front cover, back cover, and title page of a book. (CCSS: RI.K.5) *
    - Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text. (CCSS: RI.K.6)
- Use Integration of Knowledge and Ideas to:
    - With prompting and support, describe the relationship between illustrations and the text in which they appear (for example: what person, place, thing, or idea in the text an illustration depicts). (CCSS: RI.K.7)
    - With prompting and support, identify the reasons an author gives to support points in a text. (CCSS: RI.K.8)
    - With prompting and support, identify basic similarities in and differences between two texts on the same topic (for example: in illustrations, descriptions, or procedures). (CCSS: RI.K.9)
- Use Range of Reading and Level of Text Complexity to:
    - Actively engage in group reading activities with purpose and understanding. (CCSS: RI.K.10)

Academic Context and Connections

Colorado Essential Skills:

- Demonstrate curiosity, imagination, and eagerness to learn more. (Entrepreneurial Skills, Creativity/Innovation)
- Demonstrate a willingness to try new things. (Entrepreneurial Skills, Informed Risk Taking)
- Identify key attributes of a variety of information products. (e.g., books, newspapers, online or print articles, social media) (Professional Skills, Information Literacy)

Essential Questions:

- How do the illustrations help us figure out the meaning of the text?
- How are informational texts read differently than literary texts?

Essential Reasoning Skills:

- Critical readers understand that print informs and explains.

Minimum Skills Competencies:

- Evidence Outcomes marked with an asterisk (*) are the minimum competencies identified in the READ Act.

Montessori Material(s): Read Alouds—Supplemental Discussions on Author, Illustrator, Types of Texts, Illustrations, Reading Comprehension

Reading, Writing, and Communicating

Kindergarten, Standard 2. Reading for All Purposes

Prepared Graduates:

- Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.

Grade Level Expectation:

- Develop basic reading skills through the use of foundational skills.

GLE Code: RW.K.2.3

Evidence Outcomes

Students Can:

- Demonstrate understanding of the organization and basic features of print. (CCSS: RF.K.1) *
    - Follow words from left to right, top to bottom, and page by page. (CCSS: RF.K.1a)
    - Recognize that spoken words are represented in written language by specific sequences of letters. (CCSS: RF.K.1b) *
    - Understand that words are separated by spaces in print (concept of word). (CCSS: RF.K.1c) *
    - Recognize and name all upper- and lowercase letters of the alphabet. (CCSS: RF.K.1d)*
- Demonstrate understanding of spoken words, syllables, and sounds (phonemes). (CCSS: RF.K.2)
    - Recognize and produce rhyming words. (CCSS: RF.K.2a) *
    - Count, pronounce, blend, and segment syllables in spoken words. (CCSS: RF.K.2b) *
    - Blend and segment the onset and rime of single-syllable spoken words. (adapted from CCSS: RF.K.2c) *
    - Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (adapted from CCSS: RF.K.2d) *
    - Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. (CCSS: RF.K.2e) *
    - Read text consisting of short sentences comprised of learned sight words and consonant-vowel-consonant (CVC) words. *
    - Identify phonemes for letters. *
- Know and apply grade-level phonics and word analysis skills in decoding words. (CCSS: RF.K3)
    - Demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant. (adapted from CCSS: RF.K.3a) *
    - Associate the long and short sounds with the common spellings (graphemes) for the five major vowels. (CCSS: RF.K.3b) *
    - Read common high-frequency words by sight (for example: *the*, *of*, *to*, *you*, *she*, *my*, *is*, *are*, *do*, *does*). *(CCSS: RF.K.3c)
    - Distinguish between similarly spelled words by identifying the sounds of the letters that differ. (CCSS: RF.K.3d) *
- Read emergent-reader texts with purpose and understanding. (CCSS: RF.K.4)
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. (CCSS: L.K.4)
    - Identify new meanings for familiar words and apply them accurately (for example: knowing *duck* is a bird and learning the verb *to duck*). (CCSS: L.K.4a) *
    - Use the most frequently occurring inflections and affixes (for example: *-ed*,*-s*, *re-*, *un-*, *pre-*, *-ful*, *-less*) as a clue to the meaning of an unknown word. (CCSS: L.K.4b) *
- Identify and manipulate sounds.
    - Identify and produce groups of words that begin with the same sound (alliteration). *
    - Identify the initial, medial, and final phoneme (speech sound) of spoken words. *

Academic Context and Connections

Colorado Essential Skills:

- Recognize and describe cause-and-effect relationships and patterns in everyday experiences. (Entrepreneurial Skills, Inquiry/Analysis)
- Demonstrate a willingness to try new things. (Entrepreneurial Skills, Informed Risk Taking)
- Resist distractions, maintain attention, and continue the task at hand through frustration or challenges. (Personal Skills, Perseverance/Resilience)

Essential Questions:

- How do letters connect to sounds?
- What are the parts of words?
- How do parts of words help us understand their meaning and how they sound?

Essential Reasoning Skills:

- Critical readers understand the connection between letters and sounds.
- Critical readers understand that groups of letters are words.

Minimum Skills Competencies:

- Evidence Outcomes marked with an asterisk (*) are the minimum competencies identified in the READ Act.

Montessori Material(s): Sound Games, Sandpaper Letters, Phonetic Reading, Phonogram Reading, Puzzle Words, Reader Books, Word Study

Reading, Writing, and Communicating

Kindergarten, Standard 3. Writing and Composition

Prepared Graduates:

- Craft arguments using techniques specific to the genre.

Grade Level Expectation:

- Write opinions using labels, dictation, and drawing.

GLE Code: RW.K.3.1

Evidence Outcomes

Students Can:

- Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (for example: *My favorite book is…*). (CCSS: W.K.1)
- With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (CCSS: W.K.5)
- With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (CCSS: W.K.6)

Academic Context and Connections

Colorado Essential Skills:

- Accurately recognize one's own emotions, thoughts, and values and how they influence behavior. (Personal Skills, Self-Awareness)
- Recognize personal characteristics, preferences, thoughts, and feelings. (Personal Skills, Initiative/Self-Direction)
- Compare attitudes and beliefs as an individual to others. (Civic/Interpersonal Skills, Global/Cultural Awareness)

Essential Questions:

- How do we express our opinions in writing?
- Why is it important to express our opinions in writing?

Essential Reasoning Skills:

- Critical writers can describe their opinions.

Montessori Material(s): Movable Alphabet, Reports, Writing Prompts

Reading, Writing, and Communicating

Kindergarten, Standard 3. Writing and Composition

Prepared Graduates:

- Craft informational/explanatory texts using techniques specific to the genre.

Grade Level Expectation:

- Write informative/explanatory texts on a topic using labels, dictation, and drawing.

GLE Code: RW.K.3.2

Evidence Outcomes

Students Can:

- Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (CCSS: W.K.2)
- With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (CCSS: W.K.5)
- With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (CCSS: W.K.6)

Academic Context and Connections

Colorado Essential Skills:

- Create information through the use of technologies.
- Recognize that problems can be identified and possible solutions can be created. (Entrepreneurial Skills, Critical Thinking/Problem Solving)
- Identify key attributes of a variety of information products (e.g., books, newspapers, online or print articles, social media). (Professional Skills, Information Literacy)
- Find information through the use of technologies. (Professional Skills, Use Information and Communications Technologies)

Essential Questions:

- How do people share ideas in print?
- Why is it important to explain ideas in writing?
- How can writers use pictures and words to explain ideas?

Essential Reasoning Skills:

- Critical writers can explain a topic.

Montessori Material(s): Movable Alphabet, Reports, Writing Prompts

Reading, Writing, and Communicating

Kindergarten, Standard 3. Writing and Composition

Prepared Graduates:

- Craft narratives using techniques specific to the genre.

Grade Level Expectation:

- Write real or imagined narratives using labels, dictation, and drawing.

GLE Code: RW.K.3.3

Evidence Outcomes

Students Can:

- Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. (CCSS: W.K.3)
- With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (CCSS: W.K.5)
- With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers. (CCSS: W.K.6)

Academic Context and Connections

Colorado Essential Skills:

- Demonstrate curiosity, imagination, and eagerness to learn more. (Entrepreneurial Skills, Creativity/Innovation)
- Demonstrate a willingness to try new things. (Entrepreneurial Skills, Inquiry/Analysis)
- Accurately recognize one's own emotions, thoughts, and values and how they influence behavior. (Personal Skills, Self-Awareness)

Essential Questions:

- How do people share stories in writing?
- Why is it important for us to write our stories?
- Why does writing our own story require us to be creative and original?

Essential Reasoning Skills:

- Critical writers can produce narratives with beginnings, middles, and ends.

Montessori Material(s): Movable Alphabet, Reports, Writing Prompts

Reading, Writing, and Communicating

Kindergarten, Standard 3. Writing and Composition

Prepared Graduates:

- Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.

Grade Level Expectation:

- Use appropriate mechanics and conventions when creating simple texts.

GLE Code: RW.K.3.4

Evidence Outcomes

Students Can:

- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. (CCSS: L.K.1)
    - Print many upper- and lowercase letters. (CCSS: L.K.1a)
    - Use frequently occurring nouns and verbs. (CCSS: L.K.1b)
    - Form regular plural nouns orally by adding /s/ or /es/ (for example: *dog, dogs*; *wish, wishes*). (CCSS: L.K.1c)
    - Understand and use question words (interrogatives) (for example: *who*, *what*, *where*, *when*, *why*, *how*). (CCSS: L.K.1d)
    - Use the most frequently occurring prepositions (for example: *to*, *from*, *in*, *out*, *on*, *off*, *for*, *of*, *by*, *with*). (CCSS: L.K.1e)
    - Produce and expand complete sentences in shared language activities. (CCSS: L.K.1f)
- Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. (CCSS: L.K.2)
    - Capitalize the first word in a sentence and the pronoun I. (CCSS: L.K.2a)
    - Recognize and name end punctuation. (CCSS: L.K.2b)
    - Write a letter or letters for most consonant and short-vowel sounds (phonemes). (CCSS: L.K.2c)
    - Spell simple words phonetically, drawing on knowledge of sound-letter relationships. (CCSS: L.K.2d)

Academic Context and Connections

Colorado Essential Skills:

- Resist distractions, maintain attention, and continue the task at hand through frustration or challenges. (Personal Skills, Perseverance/Resilience)
- Articulate task requirements and identify deadlines. (Professional Skills, Task/Time Management)
- Find information through the use of technologies. (Professional Skills, Use Information and Communications Technologies)

Essential Questions:

- How do we write a complete sentence?
- How does a writer show that one sentence ends and another begins?

Essential Reasoning Skills:

- Critical writers use complete sentences.

Montessori Material(s): Metal Insets, Handwriting Work, Reading Folders, Puzzle Words (Test)

Reading, Writing, and Communicating

Kindergarten, Standard 4. Research Inquiry and Design

Prepared Graduates:

- Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.

Grade Level Expectation:

- Explore the purposes for research and inquiry by accessing resources in collaborative settings.

GLE Code: RW.K.4.1

Evidence Outcomes

Students Can:

- Participate in shared research and writing projects (for example: explore a number of books by a favorite author and express opinions about them). (CCSS:W.K.7)
- Identify a clear purpose for research or inquiry (for example: *If the class is learning about trees, is my need to know more about pets related?*).
- Ask a specific question and gather relevant information from various sources related to that question that inform clarity of purpose and conclusions about research.
- Ask primary questions of clarity, significance, relevance, and accuracy to improve quality of thinking.
- Use a variety of resources to answer questions of interest through guided inquiry (for example: texts read aloud or viewed, direct observation).
- Gather relevant information and check various information sources for accuracy (for example: In a class discussion focused on butterflies, students ask questions related to a butterfly and the life cycle.).
- With guidance and support from adults, recall information from experience or gather information from provided sources to answer a question. (CCSS:W.K.8)

Academic Context and Connections

Colorado Essential Skills:

- Recognize that problems can be identified and possible solutions can be created. (Entrepreneurial Skills, Critical Thinking/Problem Solving)
- Identify key attributes of a variety of information products (e.g., books, newspapers, online or print articles, social media). (Professional Skills, Information Literacy)
- Find information through the use of technologies. (Professional Skills, Use Information and Communications Technologies)

Essential Questions:

- Why do researchers ask questions?
- How do researchers use resources to help find the answers to their questions?

Essential Reasoning Skills:

- Researchers continually find resources to support, challenge, or change thinking.
- Researchers understand that a variety of sources may be explored to find answers (for example: direct observation, trade books, texts read aloud or viewed) to answer questions or interest through guided inquiry.
- Researchers know that for thinking to improve, it is necessary to ask critical questions.

Montessori Material(s): Writing Reports, Shared Research